

## REQUEST FOR COUNCIL ACTION

**SUBJECT:** Sanitary Sewer Management Plan – Approval and adoption of West Jordan City Wastewater Division Sanitary Sewer management Plan.

**SUMMARY:** Utah Division of Water Quality requires every public utility with a wastewater division to adopt Rule R317 as a state regulatory requirement to encourage improved management of public sanitary sewer collection systems. The program was developed by a group of stakeholders from the regulated community and the Utah Division of Water Quality. The program is authorized under rule R317-801, "Utah Sewer Management Program, (SMP)".

**FISCAL  
IMPACT:** None at this time.

**STAFF RECOMMENDATION:**

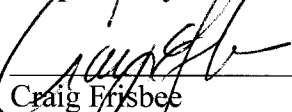
Staff recommends the City Council approve and adopt the West Jordan Wastewater Division Sanitary Sewer Management Plan.

**MOTION RECOMMENDED:**

"I move to adopt the West Jordan Wastewater Division Sanitary Sewer Management Plan Resolution No 13-172."

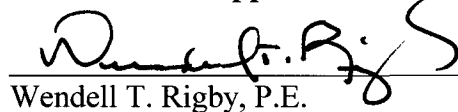
Roll Call vote required

**Prepared by:**



Craig Frisbee  
Public Utilities Manager

**Reviewed and Approved:**



Wendell T. Rigby, P.E.  
Director of Public Works

**Recommended by:**



Richard L. Davis  
City Manager

## **BACKGROUND DISCUSSION:**

The Utah Division of Water Quality adopted Rule R317 to encourage improved management of public sanitary sewer collection systems. The program was developed by a group of stakeholders from the regulated community and the Utah Division of Water Quality. The program is authorized under rule R317-801, "Utah Sewer Management Program, (SMP)".

This Sewer System Management Plan (SSMP) manual is established to provide the West Jordan Public Utility a plan and schedule to properly manage, operate, and maintain all parts of the city's sewer collection system and to reduce and prevent Sanitary Sewer Overflows (SSOs), as well as minimize impacts of any SSOs that occur.

We recognize the responsibility we have to operate the sewer system in an environmentally and fiscally responsible manner. As such, this manual will cover aspects of our collection system program necessary to provide such an efficient and effective operation.

Our goals and responsibilities under this plan:

1. Take all feasible steps to eliminate SSOs to include:
  - (a) Properly managing, operating, and maintaining all parts of the sewer collection system;
  - (b) Training system operators;
  - (c) Allocating adequate resources for the operation, maintenance, and repair of its sewer collection system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures in accordance with generally acceptable accounting practices; and, Providing adequate capacity to convey base flows and peak flows, including flows related to normal wet weather events.
2. Report in accordance with the requirements of the rule.
3. When an SSO occurs, take all feasible steps to:
  - (a) Control, contain, or limit the volume of untreated or partially treated wastewater discharged;
  - (b) Terminate the discharge;
  - (c) Recover as much of the wastewater discharged as possible for proper disposal, including any wash down water; and,
  - (d) Mitigate the impacts of the SSO.

# THE CITY OF WEST JORDAN, UTAH

A Municipal Corporation

RESOLUTION NO. 13-172

## A RESOLUTION AUTHORIZING THE ADOPTION OF THE WEST JORDAN WASTEWATER DIVISION SANITARY SEWER MANAGEMENT PLAN

**WHEREAS**, the Utah State Division of Water Quality requires all sewer utilities within the state of Utah to develop and maintain a Sanitary Sewer Management Plan under Utah State Administrative Code R317. The City Council of the City of West Jordan desires to ensure compliance with Utah State Administrative Code 317 by adopting the West Jordan City Wastewater Division Sanitary Sewer Management Plan; and

**WHEREAS**, the West Jordan City Council is authorized to adopt this plan,

**NOW, THEREFORE**, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF WEST JORDAN, UTAH, THAT:

Section 1. The City Council is authorized and directed to adopt the attached Agreement entitled as follows:

‘West Jordan City Wastewater Division Sanitary Sewer Management Plan’

Section 2. This plan shall take effect immediately.

**ADOPTED** by the City Council of West Jordan, Utah, this \_\_\_\_\_ day of \_\_\_\_\_ 2013.

CITY OF WEST JORDAN

By: \_\_\_\_\_  
Mayor Melissa K. Johnson

ATTEST:

\_\_\_\_\_  
MELANIE BRIGGS, MMC  
City Clerk/Recorder

Voting by the City Council	"AYE"	"NAY"
Councilmember Chris McConnehey	_____	_____
Councilmember Judy Hansen	_____	_____
Councilmember Ben Southworth	_____	_____
Councilmember Justin Stoker	_____	_____
Councilmember Clive M. Killpack	_____	_____
Councilmember Chad Nichols	_____	_____
Mayor Melissa K. Johnson	_____	_____

# **West Jordan City Wastewater Division**

## **Sanitary Sewer Management Plan**

### **Introduction**

West Jordan City Wastewater is a public entity established in Utah under the Utah State Code. West Jordan City was established in 1849 and provides sewage collection and/or treatment to the residents and businesses within the city limits. This Sewer System Management Plan (SSMP) manual has been established to provide a plan and schedule to properly manage, operate, and maintain all parts of the sewer collection system to reduce and prevent SSOs, as well as minimize impacts of any SSOs that occur. The Management for this entity recognizes the responsibility it has to operate the sewer system in an environmentally and fiscally responsible manner. As such, this manual will cover aspects of the collection system program necessary to provide such an operation. This manual may refer to other programs or ordinances and by reference may incorporate these programs into this manual.

### **Definitions**

The following definitions are to be used in conjunction with those found in Utah Administrative Code R317. The following terms have the meaning as set forth:

- (1) "BMP" means "best management practice".
- (2) "CCTV" means "closed circuit television".
- (3) "CIP" means a "Capital Improvement Plan".
- (4) "DWQ" means "the Utah Division of Water Quality".
- (5) "FOG" means "fats, oils and grease". This is also referred to as a Grease Oil and Sand Program(GOSI).
- (6) "I/I" means "infiltration and inflow".

(7) "Permittee" means a federal or state agency, municipality, county, district, and other political subdivision [public entity] of the state that owns or operates a sewer collection system or who is in direct responsible charge for operation and maintenance of the sewer collection system. When two separate federal or state agency, municipality, county, district, and other political subdivision of the state are interconnected, each shall be considered a separate Permittee.

(8) "SECAP" means "System Evaluation and Capacity Assurance Plan".

(9) "Sewer Collection System" means a system for the collection and conveyance of wastewaters or sewage from domestic, industrial and commercial sources. The Sewer Collection System does not include sewer laterals under the ownership and control of an owner of real property, private sewer systems owned and operated by an owner of real property, and systems that collect and convey stormwater exclusively.

(10) "SORP" means "Sewer Overflow Response Plan"

(11) "SSMP" means "Sewer System Management Plan".

(12) "SSO" means "sanitary sewer overflow", the escape of wastewater or pollutants from, or beyond the intended or designed containment of a sewer collection system.

(13) "Class 1 SSO" (Significant SSO) means a SSO or backup that is not caused by a private lateral obstruction or problem that:

(a) affects more than five private structures;

(b) affects one or more public, commercial or industrial structure(s);

(c) may result in a public health risk to the general public;

(d) has a spill volume that exceeds 5,000 gallons, excluding those in single private structures; or

(e) discharges to Waters of the State of Utah.

(14) "Class 2 SSO" (Non Significant SSO) means a SSO or backup that is not caused by a private lateral obstruction or problem that does not meet the Class 1 SSO criteria.

(15) "USMP" means the "Utah Sewer Management Program".

## **General SSO Requirements**

The following general requirements for SSO's are stipulated in R317-801 and are included here as general information.

*1) The permittee shall take all feasible steps to eliminate SSOs to include:*

*(a) Properly managing, operating, and maintaining all parts of the sewer collection system;*

*(b) training system operators;*

*(c) allocating adequate resources for the operation, maintenance, and repair of its sewer collection system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures in accordance with generally acceptable accounting practices; and,*

*(d) providing adequate capacity to convey base flows and peak flows, including flows related to normal wet weather events. Capacity shall meet or exceed the design criteria of R317-3.*

*(2) SSOs shall be reported in accordance with the requirements below.*

*(3) When an SSO occurs, the permittee shall take all feasible steps to:*

*(a) control, contain, or limit the volume of untreated or partially treated wastewater discharged;*

*(b) terminate the discharge;*

*(c) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water; and,*

*(d) mitigate the impacts of the SSO.*

## **SSO Reporting Requirements**

R317-801 stipulates when and how SSO's are reported. Following are those reporting requirements as of 04/23/2012.

*SSO REPORTING. SSOs shall be reported as follows:*

*(1) A Class 1 SSO shall be reported orally within 24 hrs and with a written report submitted to the DWQ within five calendar days. Class 1 SSO's shall be included in the annual USMP report.*

*(2) Class 2 SSOs shall be reported on an annual basis in the USMP annual report.*

*ANNUAL REPORT. A permittee shall submit to DWQ a USMP annual operating report covering information for the previous calendar year by April 15 of the following year.*

## **Sewer Use Ordinance**

West Jordan City Wastewater Operations division has a sewer use [ordinance, rules, or regulations] that has been adopted by the governing body. This [ordinance or rules] contains the following items as stipulated by Utah State Code R317-801:

1. Prohibition on unauthorized discharges,
2. Requirement that sewers be constructed and maintained in accordance with R317-3,
3. Ensures access or easements for maintenance, inspections and repairs,
4. Has the ability to limit debris which obstruct or inhibit the flow in sewers such as foreign objects or grease and oil,
5. Allows for the inspection of industrial users, and
6. Provides for enforcement of for ordinance or rules violations.

The following elements are included in this SSMP:

- General Information

- Operations and Maintenance Program
- Sewer Design Standards
- Sanitary Sewer Overflow Response Plan
- Grease, Oil and Sand Interceptor Management Program
- System Evaluation and Capacity Assurance Plan
- SSMP Monitoring and Measurement Plan
- Sewer System Mapping Program
- Basement Backup Program [Optional]
- No Fault Sewage Backup Claims Program [Optional]

This program is intended to be a guidance document and is not intended to be part of a regulatory requirement. As such, failure to strictly comply with documentation requirements is, in and of themselves, not a failure of the program's effectiveness. Documentation failures are intended to be identified during system self-audits and will be addressed as training opportunities. Significant system failures will be followed up with corrective action plans. This corrective action process will be implemented by all individuals involved in the SSMP program. Not all [public entity] employees will necessarily be involved in the collection system operations. As such, not all employees will receive program training. Finally, although not a part of this SSMP program, [public entity] is an active participant in the Blue Stakes of Utah Utility Notification system. This system, regulated under title 54-8A of the Utah State Code, stipulates utility notification of all underground operators when excavation takes place. The intent of this regulation is to minimize damage to underground facilities. [Public entity] has a responsibility to mark their underground sewer facilities when notified an excavation is going to take place. Participation in the Blue Stakes program further enhances the protection of the collection system and reduces SSO's.



## **West Jordan City Wastewater Division**

### **SSMP – General Information**

This Sanitary Sewer Management Plan was adopted by the West Jordan City Mayor and City Council on \_\_/\_\_/\_\_\_\_.

The responsible representative(s), position and phone number for West Jordan City Wastewater with regard to this SSMP is/are

Utility Manager: Craig Frisbee

Public Works Director: Wendell Rigby

Mayor: Melisa Johnson

Council:

Chris McConnehey (District 1)

Judy Hansen (District 2)

Ben Southworth (District 3)

Justin Stoker (District 4)

Clive M. Killpack (At Large)

Chad Nichols (At Large)

#### **Description of Roles and Responsibilities**

The following positions have the described responsibility for implementation and management of the specific measures as described in the SSMP.

(Include specific public entity information below)

#### ***Manager***

This individual is responsible for overall management of the sanitary sewer collection system. Responsibilities include working with governance to assure sufficient budget is

allocated to implement the SSMP, maintenance of the SSMP documentation, development of a capital improvement program and general supervision of all staff.

### ***Operations Supervisor***

This individual is responsible for daily implementation of the SSMP. This includes maintenance activities, compliance with SORP requirements, and monitoring and measurement reporting requirements.

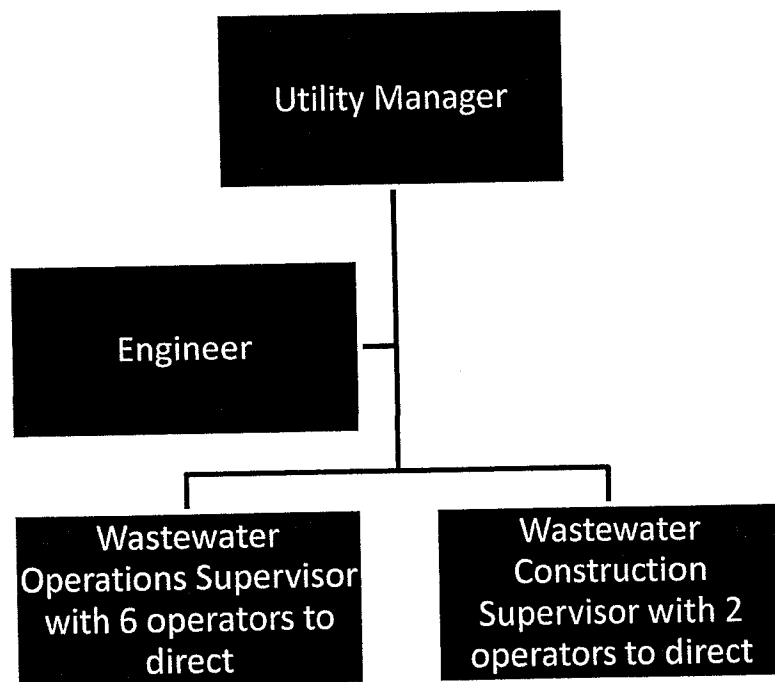
### ***Engineer***

This individual is responsible for the development and maintenance of collection system design standards, maintenance of collection system mapping and maintenance of the SECAP program.

[note that the above positions may be multiple people or it may be all one person depending on the size of the organization]

### **Organization Chart**

Below is the organization chart associated with the SSMP [this could be a large chart or just one person depending on organization size]:



## **West Jordan City Wastewater**

### **Operations and Maintenance Program**

West Jordan City has established this sanitary sewer system operations and maintenance program to ensure proper system operations, to minimize any basement backups or SSOs, and to provide for replacement, refurbishment, or repair of damaged or deteriorated piping systems. The combined maintenance program should insure that the environment and health of the public are protected at a reasonable cost for the end users. To this end, the following areas are described and included in this maintenance program:

- System Mapping
- System Cleaning
- System CCTV Inspection
- Defect Reporting
- Damage Assessment
- Defect Restoration

#### System Mapping

An up to date map is essential for effective system operations. West Jordan City has assigned the mapping responsibility to the facility engineer or the GIS Department who will prepare and maintain current mapping for the entire sanitary sewer system. Mapping may be maintained on either paper or in a graphical information system (GIS) or a combination of both. Current mapping is available at the following locations:

Webpage: [www.wjordan.com/PW/Maps.com](http://www.wjordan.com/PW/Maps.com)

GIS database I drive:\Engineering\Sewer Model\v14  
(Internal Use only)

Should any employee identify an error in the mapping, they should document the error on a defect report and give it to the engineer, or GIS department.

#### System Cleaning

Sanitary sewer system cleaning is accomplished through various means and methods. West Jordan City has established a goal to clean the entire system every four years. Based on experience over the past 20 years, this frequency significantly reduces the number of basement backups, controls grease problems and flushes any bellies in the

system. In addition West Jordan City Waste Water Department has a list of identified hot spots which are maintained at a higher frequency. Systems which may have roots are hydraulically cut out and areas where restaurants are close together are hydraulically flushed with a high pressure jet truck. The following methods are employed to provide system cleaning:

West Jordan City Hydraulic Cleaning  
Mechanical/ Hydraulically Root Control  
Hydraulically FOG Control

Cleaning records are maintained at Waste Water Department at Public Works and on the T Drive. Contractors are required to provide cleaning records associated with their work. Cleaning history may also be entered into the GIS; however, this process is not currently available. Should the cleaning process identify a serious defect, the problem should be reported to the Operations Supervisor. The Wastewater Operations Supervisor should be given the defect reports for further action. The defect report should be specific as to location and type of problem. A copy of the Defect Report Form is included at the end of this narrative section. A summary of cleaning activities shall be prepared annually by the Wastewater Operations Superintendent or designee. This summary will normally be presented to the Utility Manager.

#### System CCTV Inspection

Closed Circuit TV inspections of the sanitary sewer system are used to assess pipe condition and identify problems or possible future failures which need current attention. The CCTV process also identifies the piping condition to allow for replacement prior to failure. Generally the Wastewater Department will conduct CCTV inspection with its own staff. Inspections of the system will occur every 10 to 15 years. This inspection frequency is based on the pipe aging process. As such, once the system has been inspected completely, change usually occurs gradually. CCTV will also be employed when a systems operation or capacity is questioned or when an SSO occurs. Any defects identified during the CCTV process should be reported on a Defect Report Form and the form should be given to the Wastewater Operations Supervisor for possible repairs. Documentation of CCTV activities will be maintained at Publics Works Wastewater Division. When contractors are employed to inspect the sanitary sewer system they will be required to submit records for their work. The Wastewater Operations Supervisor will prepare an annual summary of CCTV completed for that

calendar year.

### Manhole Inspection

West Jordan City currently doesn't schedule annual inspection of the sanitary sewer manholes (M/H). We must rely upon the cleaning and CCTV crews to report failing manholes as they locate them as part of our general maintenance cleaning or CCTV work. The M/H inspection involves the identification of foreign objects and surcharging that may be present. If a manhole inspection crew existed, crews inspecting the manholes would be given maps by the District Engineer who will monitor the progress and completeness of the inspection process. When a potential defect is identified the manhole should be flagged. Flagged manholes should be reported to the Operations Supervisor and then checked within several days to determine further action. If, during the inspection process, the inspection crew believes a problem is imminent, they should immediately cease inspecting and inform the Wastewater Operations Supervisor of the problem. A cleaning crew should be dispatched immediately to ensure correct system operations. All inspection records should be retained for documentation of work performed.

### Defect Reporting

Defect Reports generated through the cleaning and CCTV inspection programs will be prioritized for correction by the Wastewater Operations Supervisor, or the Capital Improvements Manager due to size of some defects. Any defects which have the potential for catastrophic failure and thus create a sanitary sewer overflow should be evaluated immediately and discussed with the Utility Manager for repair. Repair methods may include:

- Spot Excavation Repairs
- Spot Band Repairs
- Segment Excavation Replacements
- Segment Lining
- Manhole Rehabilitation

When a defect is not flagged for immediate repair, it should be considered for placement on the "hot spot" list. This will allow for vigilant maintenance to ensure failure and a subsequent sanitary sewer overflow do not take place. Defect reports should be used in the Budget process to determine what financial allocation should be made in the

next Budget year. The Wastewater Operations Supervisor should include outstanding defects in the annual report.

### Collection System Damage

Collection damage may occur as a result of multiple factors, some identified as a result of inspection activities and some identified as a result of damage by third parties such as contractors.

#### Damage Identification

The identification of system damage which may result in an SSO or basement backup is important to prevent environmental, public health, or economic harm. Identification of damage may be from either internal activities or external activities.

Internal activities which may result in the identification of damage include the following:

1. Collections Maintenance Activities
2. CCTV Inspection Activities
3. Manhole Inspection Activities

These three activities are discussed in this Maintenance Program and the identification of damage will result in the generation of a Defect Report. Generally, damage identification is an iterative and continuous process.

External activities which identify damages include:

1. Contractor Notification of Damage
2. Directional Drilling Notification of Damage
3. Public Damage Complaints

All three of these notifications generally require immediate response. Staff should respond and evaluate the seriousness of the damage and the effect on the environment. Damages which include a release to the environment should be handled in accordance with the SORP. Damages which cause a basement backup should trigger the Basement Backup program. Damages which remain in the trench should be de minimize and may not require more action than the repair of the damage.

Whatever the cause of collection system damage, the response should be expeditious to prevent environmental or economic harm. District staff should consider all damages an emergency until it is shown by inspection to be a lower priority.

#### Damage Response Actions

When damages occur in the collection system, the following actions help define the path staff should take. These action plans are not inclusive of all options available but are indicative of the types of response that may be taken.

##### **Stable Damage**

Inspection activities may show a system damage which has been there for an extended period of time. Such damage may not require immediate action but may be postponed for a period of time. When stable damage is identified and not acted upon immediately, a defect report should be prepared. If such a defect is identified and repaired immediately, a defect report is not needed. An example of stable damage could be a major crack in a pipeline or a severely misaligned lateral connection where infiltration is occurring.

##### **Unstable Damage**

Unstable damage is damage which has a high likely hood that failure will occur in the near future. Such damage may be a broken pipe with exposed soil or a line which has complete crown corrosion. In these cases, action should be taken as soon as there is a time, a contractor, materials and other necessary resources available. When such unstable damage is identified, if possible, consideration should be given to trenchless repairs which may be able to be completed quicker than standard excavation. Immediately after identification the Manager should be contacted to review and take care of budget considerations.

##### **Immediate Damage**

When a contractor or others damage a collection line such that the line is no longer capable of functioning as a sewer, this immediate damage must be handled expeditiously. Such damage allows untreated wastewater to pool in the excavation site, spill into the environment or possibly backup

into a basement. Under such conditions priority should be given to an immediate repair. Since excavation damage may be a result of contractor negligence or it could be a failure of West Jordan City to adequately protect the line by appropriately following the Damages to Underground Utilities Statute 54-8A, priority should be given to effecting a repair and not to determining the eventual responsible party.

As can be determined from the above action plans, priority should always be preventing SSO's and attendant environmental damage, to prevent basement backups and financial impacts, and to prevent public health issues.



## **West Jordan City**

# **Sewer Design Standards**

Included or by reference in this section are the sanitary sewer design standards for West Jordan City. These design standards are intended to be used in conjunction with Utah Administrative Code R317-3. Where a conflict exists between these two standards, the Administrative Code shall prevail.

West Jordan City's design standards are available online for review at the following address.

<http://www.ci.west-jordan.ut.us/Engineering.aspx?pgID=3.7.1.4>

## **West Jordan City**

### **Sanitary Sewer Overflow Action Plan**

Whenever sanitary sewage leave the confines of the piping system, immediate action is necessary to prevent environmental, public health or financial damage from occurring. In addition, quick action is normally needed to mitigate damage which may have already occurred. For the purpose of this section, the following are part of the emergency action plan.

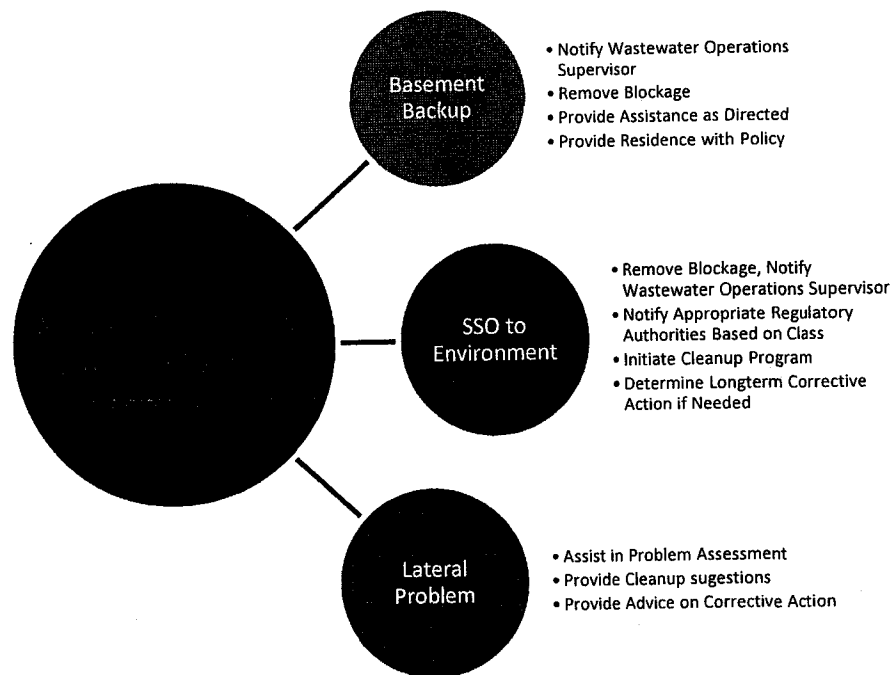
1. Basement backups
2. Sanitary sewer overflows
3. Sanitary sewer breaks which remain in the trench
4. Sewer lateral backups

All of the above conditions are likely to cause some damage. Each should be treated as an emergency, and corrective actions taken in accordance with West Jordan City's directions. Items 1 & 2 above should be reported immediately based on whether they constitute a Class 1 or Class 2 SSO. As stated in the definition section of the SSMP Introduction, a Class 1 SSO is an overflow which affects more than five private structures; affects a public, commercial or industrial structure; results in a significant public health risk; has a spill volume more than 5,000 gallons; or has reached Waters of the State. All other overflows are Class 2 SSO's. All Class 1 SSO's should be reported immediately. Class 2 SSO's should be documented and reported in the annual SSMP report and included in the Municipal Wastewater Planning Program submitted to the State. Item 3 may be reported to the local health department if, in the opinion of the responsible staff member there is potential for a public health issue. An example of where a public health issue may be present is when an excavator breaks both a sewer and a water line in the same trench. In such cases, the local health department representatives should be contacted and the situation explained. If the health representative requests further action on the part of the West Jordan City, staff should try and comply. If, in the opinion of the responsible staff member, the health department request is unreasonable, The Manager should be immediately notified. Care should always be taken to error on the side of protecting public health over financial considerations. When a basement backup occurs, the staff member responding should follow the Basement Backup Program procedures. Lateral backups, while the responsibility of the property owner, should also

be treated as serious problems. Care should be taken to provide advice to the property owner in such cases, but the property owner is ultimately the decision maker about what actions should be taken.

### Response Activities

There are specific steps that should be followed once a notification is received that an overflow may be occurring. The following figure outlines actions that could be taken when West Jordan City receives notice that a possible overflow has or is occurring.



### **General Notification Procedure**

When a Class 1 SSO occurs specific notification requirements are needed. In such cases the following Notification procedure should be followed and documented. Failure to comply with notification requirements is a violation of R317-801.

### Agency Notification Requirements

Both the State of Utah Division of Water Quality and the local health department should be immediately notified when an overflow is occurring. Others that may require notification include local water suppliers, affected property owners and notification may

be required to Utah Division of Emergency Response and Remediation if hazardous materials are involved. The initial notification must be given within 24 hours. However, attempts should be made to notify them as soon as possible so they can observe the problem and the extent of the issue while the problem is happening. A notification form is provided to document notification activities. After an SSO has taken place and the cleanup has been done, a written report of the event should be submitted to the State DEQ within five days (unless waived). This report should be specific and should be inclusive of all work completed. If possible the report should also include a description of follow-up actions such as modeling or problem corrections that has or will take place.

### Public Notification

When an SSO occurs and the extent of the overflow is significant and the damage cannot be contained, the public may be notified through proper communication channels. Normally the local health department will coordinate such notification. Should West Jordan need to provide notification it could include press releases to the local news agencies, publication in an area paper, and leaflets delivered to home owners or citizens in the area of the SSO. Notification should be sufficient to insure that the public health is protected. When and if Federal laws are passed concerning notification requirements, these legal requirements are incorporated by reference in this document. In general, notification requirements should increase as the extent of the overflow increases.

### Overflow Cleanup

When an overflow happens, care should be taken to clean up the environment to the extent feasible based on technology, good science and financial capabilities. Cleanup could include removal of contaminated water and soil saturated with wastewater and toilet paper, disinfection of standing water with environmentally adequate chemicals or partitioning of the affected area from the public until natural soil microbes reduce the hazard. Cleanup is usually specific to the affected area and may differ from season to season. As such, this guide does not include specific details about cleanup. The responsible staff member in conjunction with the State DEQ, the local health department and the owner of real property should direct activities in such a manner that they are all satisfied with the overall outcomes. If, during the cleaning process, the responsible staff member believes the State or the County is requesting excessive actions, the Manager should be contacted.

### Corrective Action

All SSO's should be followed up with an analysis as to cause and possible corrective actions. An SSO which is the result of grease or root plug may be placed on the preventative maintenance list for more frequent cleaning. Serious or repetitive plugging problems may require the reconstruction of the sewer lines. An overflow that results from inadequate capacity should be followed by additional system modeling and either flow reduction or capacity increase. If a significant or unusual weather condition caused flooding which was introduced to the sanitary sewer system incorrectly, the corrective action may include working with other agencies to try and rectify the cross connection from the storm sewer to the sanitary sewer or from home drainage systems and sump pumps. Finally, should a problem be such that it is not anticipated to reoccur, no further action may be needed.

# **Grease, Oil and Sand Management Program**

## **Purpose:**

The purpose of this program is to provide for the control and management of grease, oil and sand discharges to the District collection system. This program will provide a means to reduce interference with the collection system operation and pass through at the treatment plant.

## **Regulatory Authority:**

Regulatory authority to implement this program is found in the Code of Federal Regulations in 40 CFR 403, General Pretreatment Regulations. State authority for the program is given in the Utah Administrative Code R317-8-8, Pretreatment. Local Authority is found in \_\_\_\_\_.

## **Program Implementation:**

This program shall be implemented in such a manner as to minimize the impact on businesses which may be affected by this program. In all cases West Jordan City will maintain a uniform decision making process. West Jordan City shall allow for appeals of program requirements in accordance with the appeal process approved by West Jordan City.

The following steps detail the procedure that West Jordan City personnel shall follow in implementing this program.

### *Evaluation:*

South Valley Sewer Improvement District staff will evaluate an industrial user (IU) discharge to determine if grease, oil or sand management is

required at the following events:

1. Issuance of a construction or remodeling building permit.
2. When the collection line in front of the business is CCTV inspected as part of the sanitary sewer system preventative maintenance program.
3. When a downstream sanitary sewer pipeline plugs due to oil, grease or sand.

No further action will be taken if it is determined that no potential exists for significant enrichment of the wastewater with grease, oil or sand.

Enrichment is defined as a discharge with greater volume or concentration of grease, oil or sand than that discharged from a typical residential connection. For oil and grease, the typical residential discharge has less than 100 mg/L of oil and grease for any sample taken. Greater concentrations would be enrichment. Also, a significant buildup of oil and grease in the lateral would indicate enrichment. Sand and dirt is not typically discharged from a residential connection. Any potential for sand or dirt discharge would be enrichment.

#### *Implementation:*

IU's which are determined to enrich or have the potential to enrich the wastewater with grease, oil, or sand will be required to develop a management plan in accordance with the following tracks.

#### TRACK 1

This track is available for IU's which exist at the time of program implementation. However, not all existing IU's may be permitted to use it. Determination will be made on a case by case basis. IU's on this track will be permitted to either

pay a contractor or West Jordan City to clean the main sewer line from their place of business to the nearest trunk line. A trunk line is any sewer line which has an inside diameter of eighteen inches or larger or has been classified as a trunk line by West Jordan City. Cleaning frequency will be determined by inspections performed by the West Jordan City Wastewater Operations Supervisor.

## TRACK 2

This track requires the IU to install and maintain a grease, oil and/or sand trap on their premises. Quarterly cleaning reports may be required at the discretion of South Valley Water Reclamation. South Valley Water Reclamation shall inspect and test the grease trap on a periodic basis. The following fees shall apply:

Inspection Fee	\$ (See SVWR)
Testing Fee	\$ (see SVWR)

Should the testing reveal grease and oil in excess of 100 mg/L, a fine of \$(determined by South Valley Water Reclamation) for each pound of oil and grease discharged for the past reporting period shall be assessed. The pounds of grease and oil shall be determined by using the following equation:

$$(\text{Total Reporting Period water use in MG})(\text{mg/L O\&G} - 100)(8.34)$$

The IU will also be ordered to return to compliance immediately. Retesting will be done within thirty days if the



trap has not been cleaned and a cleaning report submitted. Another inspection and testing fee will be assessed. Should the test results still not comply with the 100 mg/L oil and grease limit, enforcement will be escalated in accordance with South Valley Water reclamation's Enforcement Response Plan. In addition, an entity which is frequently violating the 100 mg/L limit may be issued a pretreatment permit in order to further regulate the IU

Should the testing reveal TSS in excess of 250 mg/L, South Valley water Reclamation has the authority to issue a fine of \$X.XX for each pound of TSS discharged for the past reporting period shall be assessed. The pounds of TSS shall be determined by using the following equation:

$$(\text{Total Reporting Period water use in MG})(\text{mg/L TSS} - 250)(8.34)$$

The IU will also be ordered to return to compliance immediately. Retesting will be done within thirty days if the trap has not been cleaned and a cleaning report submitted. Another inspection and testing fee will be assessed. Should the test results still not comply with the 250 mg/L TSS surcharge limit, the IU will be placed on a continuous inspection, testing and the surcharge schedule for TSS.

By following the steps discussed above, West Jordan City hopes to maintain a collection system free from excessive backups and a treatment plant in compliance with UPDES discharge conditions.

*List of Acceptable Entities That Recycle Oil and Grease*

The following list of grease and oil recyclers should be given to all IU's who operate a grease trap. This list may not be all inclusive. Other recyclers may be used if it can be shown that they discharge of the waste appropriately.

<b>Recycler</b>	<b>Phone Number</b>	<b>Address</b>
Renegade Oil	801-973-7912	1141 S. 3200 W, SLC, Utah 84104